

**TO: Suborbital Science Program**  
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## **Flight Report**

|  |   |
|--|---|
| <b>Aircraft :</b>                          | Kenn Borek Air DC-3T Basler   |
| <b>Operating Site(s)<br/>From / To :</b>   | Concordia/Casey Skiway  |
| <b>Flight Date :</b>                       | December 22, 2009 (AEDT)  |
| <b>Flight Number /<br/>Data Flight # :</b> | F27 / 24  |
| <b>Time out:</b>                           | <b>1045 UTC</b>   |
| <b>Time in:</b>                            | <b>1542 UTC</b>   |
| <b>Flight Time :</b>                       | 5 hrs   |
| <b>Flt Request # / PI:</b>                 | NASA 20090602-084128 (Blankenship)  |
| <b>Purpose of Flight :</b>                 | <b>Data <input checked="" type="checkbox"/> Ferry <input type="checkbox"/> Functional Check <input type="checkbox"/> Other <input type="checkbox"/></b>   |
| <b>Sensor Payload :</b>                    | University of Texas at Austin HiCARS ice penetrating radar; UT Reigl LD-90 laser distance meter; UT Geometrics 823-A magnetometer; USAF Sigma Space photon counting lidar, NGA BGM-3 gravity meter  |
| <b>Comments :</b>                          | <p>The aircraft flew on its eighth survey flight over the Aurora Subglacial Trench region, after refueling at Concordia Station. The primary target was a englacial tie line cutting across three key radial lines flown from Casey last year. This line will be used to constrain the age of the deep ice using the time series from the EPCIA/Dome C ice core. A second goal was completing the corridor of icesat lines over Totten Glacier. We flew track 1312 down the center of the main trunk. Laser measurements were returned for 83% of that leg.</p> <p>All systems performed excellently.</p> |

**SUBMITTED BY: Duncan Young      30 December 2009**